

using the outer control loop to perform slow transmitting power control in the base station, which enables uplink from the subscriber station to the base station and downlink from the base station to the subscriber station.

23. (NEW) The method as claimed in claim 22, wherein the transmitting power interval is defined by a maximum transmitting power and a minimum transmitting power.

24. (NEW) The method as claimed in claim 22, wherein the transmitting power interval is defined individually for the subscriber station and the base station.

25. (NEW) The method as claimed in 22, wherein the transmitting power intervals for a number of subscriber stations which have parallel connections in at least one of a common frequency band and a common timeslot, are dimensioned such that a predetermined dynamic range of a receiving device of the base station is not exceeded.

26. (NEW) The method as claimed in 22, wherein the base station signals the subscriber station with the transmitting power interval or both a maximum transmitting power and a minimum transmitting power for the signal transmission in the uplink.

27. (NEW) The method as claimed in claim 22, wherein the transmitting power interval is dimensioned in dependence on a service transmitted over the link between the base station and the subscriber station.

28. (NEW) The method as claimed in claim 22, wherein the transmitting power interval is dimensioned in dependence on a speed of the subscriber station.

29. (NEW) The method as claimed in claim 22, wherein the transmitting power interval is progressively reduced with increasing communication speed of the subscriber station.

30. (NEW) The method as claimed in claim 28, wherein the speed of the subscriber station is estimated from measurements with respect to a variation of transmission characteristics of the radio interface, the transmission characteristics being determined by a characteristic value.

31. (NEW) The method as claimed in claim 30, wherein at least one of a bit error rate, a time frame error rate, a path attenuation and an interference is determined at the subscriber station as the characteristic value for the transmission characteristics.

32. (NEW) The method as claimed in claim 30, wherein variation of the characteristic value over a signaling channel transmitted with constant transmitting power by the base station is determined in the subscriber station.

33. (NEW) The method as claimed in claim 30, wherein the characteristic value is averaged over a particular time interval and an averaged characteristic value is taken into consideration for the dimensioning the transmitting power interval.

34. (NEW) The method as claimed in claim 33, wherein the time interval for averaging corresponds to a periodicity of the slow transmitting power control in the outer control loop.

35. (NEW) The method as claimed in claim 30,
wherein the transmitting power interval is re-dimensioned when the variation of the transmission characteristics of the radio interface determined drops below a predetermined threshold value.

36. (NEW) The method as claimed in claim 22, wherein at least one of the fast and slow transmitting power control for at least one of the uplink and the downlink is based on a determination of a carrier/interference ratio.

37. (NEW) The method as claimed in claim 30, wherein the characteristic value is compared with a target characteristic value in the outer control loop and a difference between the values is calculated.

38. (NEW) The method as claimed in claim 37, wherein the difference between the values is weighted by a weighting factor to produce a weighted difference.

39. (NEW) The method as claimed in claim 38, wherein the weighted difference is added to a target carrier/interference ratio of a preceding control interval to thereby determine a current target carrier/interference ratio for the current control interval.

40. (NEW) The method as claimed in claim 39, wherein the outer control loop for the subscriber station is also implemented in the base station,

a current target carrier/interference ratio is generated in the outer control loop from a current characteristic value,

the current characteristic value is determined by the subscriber station and signaled to the base station, and

the current target carrier/interference ratio is signaled to the subscriber station.

41. (NEW) The method as claimed in claim 22, wherein the radio communications system supports a TDD transmission method.

42. (NEW) The method as claimed in claim 22, wherein the radio communications system supports an FDD transmission method.

43. (NEW) The method as claimed in claim 23, wherein the transmitting power interval is defined individually for the subscriber station and the base station.

44. (NEW) The method as claimed in 43, wherein the transmitting power intervals of for a number of subscriber stations which have parallel connections in at least one of a common frequency band and a common timeslot, are dimensioned such that a predetermined dynamic range of a receiving device of the base station is not exceeded.

45. (NEW) The method as claimed in 44, wherein the base station signals the subscriber station with the transmitting power interval or both a maximum transmitting power and a minimum transmitting power for the signal transmission in the uplink.

46. (NEW) The method as claimed in claim 45, wherein the transmitting power interval is progressively reduced with increasing communication speed of the subscriber station.

47. (NEW) The method as claimed in claim 29, wherein the speed of the subscriber station is estimated from measurements with respect to a variation of transmission characteristics of the radio interface, the transmission characteristics being determined by a characteristic value.

48. (NEW) The method as claimed in claim 47, wherein at least one of a bit error rate, a time frame error rate, a path attenuation and an interference is determined at the subscriber station as the characteristic value for the transmission characteristics.

49. (NEW) The method as claimed in claim 31, wherein variation of the characteristic value over a signaling channel transmitted with constant transmitting power by the base station is determined in the subscriber station.

50. (NEW) The method as claimed in claim 32, wherein the characteristic value is averaged over a particular time interval and an averaged characteristic value is taken into consideration for the dimensioning the transmitting power interval.

51. (NEW) The method as claimed in claim 34, wherein the transmitting power interval is re-dimensioned when the variation of the transmission characteristics of the radio interface determined drops below a predetermined threshold value.

52. (NEW) The method as claimed in claim 36, wherein the characteristic value is compared with a target characteristic value in the outer control loop and a difference between the values is calculated.
